Contents lists available at GrowingScience

Management Science Letters

homepage: www.GrowingScience.com/msl

A study on relationship between human resources and strategic performance: The mediating role of productivity

Hosam Shrouf^a, Shaker Al-Qudah^{a*}, Khaldoon Al Khawaldeh^b, Abdallah Mishael Obeidat^c and Abas Al Rawashdeh^d

CHRONICLE

ABSTRACT

Article history:
Received: March 3, 2020
Received in revised format:
March 25 2020
Accepted: May 2, 2020
Available online:
May 3, 2020

Keywords: Human Resources Strategic Performance Productivity Banks Sector Jordan The objective of the study is to investigate the mediating role of the productivity of the banks sector in Jordan based on the relationship between human resources and strategic performance from the point of view of the senior management managers and functional unit managers (human resources, marketing, finance and accounting). Human resources were measured through human resource activities. The population of the current study represented all the commercial banks in Jordan, the total number of which is 26. A survey questionnaire is prepared based on the published literature, and the data are collected from 371 respondents from the targeted banks. The necessary tests to ensure reliability and validity are performed using SPSS. The results indicate that human resources positively affected strategic performance and productivity. The findings also revealed that productivity positively mediated the relationship between human resources and the commercial banks' strategic performance.

© 2020 by the authors; licensee Growing Science, Canada

1. Introduction

With a growing array of organizations and the scope of their actions, the twenty-first century is experiencing intense world-wide rivalry, environmental forces, and pressures that are marked by convergence, uncertainty, and dynamism as well as risks that must be avoided and opportunities that must be pursued. This forces business organizations to step away from conventional thinking systems, traditional strategic thinking management, and the simultaneous strategic management of their internal resources and external environment (Hunger, 2008; Al-Ghwayeen & Abdallah, 2018). Human resources are people in work organizations who map out general goals and priorities, plan job processes, manufacture goods and services, track efficiency, allocate financial resources, and sell products and services (Bratton et al., 2017). Human resources are among an organization's most important resources and are vital to its success, as competition between organizations to attract efficient human resources has become fierce (Tërstena et al., 2020; Obeidat et al., 2018). Human resources are a key component in all organizations, as the better the human resource performance, the better the organization's overall performance. Therefore, an organization must have good employees to complete required tasks (Andry et al., 2020). Hayton (2003) separated discretionary from conventional HRM practices. Modern HRM strategies are more effective and contribute to the alignment of individual skills with the needs of the organization. Nevertheless, discretionary activities are geared towards learning and promote employee engagement, participation, knowledge sharing, and acceptance of failure (Obeidat & Otibi, 2015).

Kaya (2006) found that human resource activities improve the effect of research on an organization's success. This suggests that if organizations are to grow their entrepreneurial activities, they will give priority to HR departments and promote their practices. Efficient workplace planning allows a company to recognize and prepare how existing and future workplace issues

* Corresponding author.

E-mail address: Sh_alqddah@asu.edu.jo (S. Al-Qudah)

^aDepartment of Business Administration, Faculty of Business, Applied Science Private University, Jordan

^bDepartment of Business Administration, Faculty of Business, Amman Arab University, Jordan

^cDepartment of Business Administration –Business Collage- JADARA University, Jordan

^dDepartment of Business Administration, Faculty of Business, Al-Zaytoonah University of Jordan, Jordan

and goals are tackled. It also offers a solid framework for creating a successful plan for the workforce (Al-Qudah et al., 2020). Strategic performance management is the mechanism by which the governance of an organization carries out a structured interpretation of its mission, organization goals, and strategy, making them observable through crucial result measures and KPIs, so corrective and proactive steps can be taken to maintain the organization's high performance (De Waal, 2013). The strategic performance measurement system (SPMS) helps the organization prepare, assess, and track its performance so that all its actions, resources, and activities can best follow its business plans to produce the desired results and generate value for shareholders (Bento, Bento & White, 2014). A strategic management system should be capable of monitoring and governing the implementation process (de Lima et al., 2009). The variations in the performance definition are derived from the various parameters and expectations implemented in the performance analysis and metrics used by managers and organizations (Alma'ani et al., 2019). The concept of productivity is concerned with the relationship between input and output. A Dutch pharmacy study (Grip & Sieben, 2005) showed that organizations do not compensate workers with (over- and under-rewards) skills and experience job based on contributing them to productivity-enhancing organizations, and does not have significant productivity impact. The study also showed that training workers in the event of vacancy issues tends to be an acceptable human resource activity because it improves productivity without impacting the overall wage level. Simultaneously, providing better salaries for newly employed workers limits productivity. Recruiting more workers on a temporary contract basis leads to a detrimental impact on productivity without impacting the salary level. The process of measuring and determining productivity is a difficult matter in the field of services. For example, in the banks sector, an organization may consider a number of client's needs in a year. But how different types of needs, such as smart services and other new services in this area, can be measured is accelerating. Productivity is one primary concern of any organization, as it affects that organization's well-being and performance. Productivity and consistency are among the most critical problems at the local level. The majority of HRM roles execute this key function in an organized manner in their HRM organization (Arulrajah, 2017). If there are basic HRM problems within the enterprise, it is incredibly difficult to achieve productivity only through regulatory systems and procedures; the primary source of knowledge production is the organization's human capital or information workers, which improve productivity (Asongu, 2017; Abualoush et al., 2018). Organizations that cannot formulate adequate strategies and resources to maintain their talents will inevitably be left behind (Alkhaldi & Abdallah, 2019; Tahmasbi, 2012). Performance management has become very challenging for most organizations due to the poor performance of management design implementation, a limited emphasis on employee assessment, and a lack of accountability for the successful use of performance management programs (Mbugua et al., 2015). This has also contributed to complicated HRM problems, such as high worker turnover, noncompliant personnel, and poor motivation for employees (Burma, 2014).

This study aimed to discern the role of productivity as a mediating factor in the relationship between strategic performance and human resources, where many organizations in the Arab environment, especially the banking sector, suffer from deficiencies in the strategic performance field, which requires a distinct vision that pushes the banking sector to go global. It has been noted that there is a general shortage of studies in the Middle East, and in Jordan in particular, that attempted to examine the link between human resources and strategic performance. In addition, these effects have rarely been investigated in the banking sector. Therefore, the current study addresses this gap by investigating the proposed relationships in the banking sector in Jordan.

2. Research framework and development of hypotheses

2.1 Research framework

The model of this study is shown in Fig. 1. The model reflects the mediating role of productivity on the link between human resources and strategic performance.

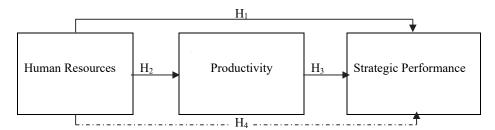


Fig. 1. The proposed study

2.2 Hypotheses development

2.2.1 Human resources and strategic performance

Human resources are one of the most valuable assets that can support organizations in achieving and maintaining a competitive advantage. Human resources are a diverse group of education, employment, and industrial expertise and other types of experiences that enables organizations to deliver superior and distinct performance (Barney, 1991). There are many factors that

affect strategic performance. This is evident in emergency theory, wherein we confirm that no optimal organizational process exists, as this theory indicates that managed human resources in addition to financial resources and strategic analysis may enhance an institution's ability to develop new products and services to improve customer satisfaction and customer care and thus contribute positively to its strategic performance (Nwachukwu & Chladkova, 2019). Strategic performance management through strategic human resource management (SHRM) is therefore one of the main mechanisms for hiring talented staff (Stanton & Nankervi, 2011; Saffar & Obeidat, 2020). Personnel management's performance and appraisal management metrics fulfill employees' needs and desires; it is a strategic goal to provide feedback on the employees' performance and task accomplishments (Li, Ashkanasy, & Ahlstrom, 2014). The management of compensation and benefits directly deals with HR practices and incentives and is a direct cause of increases in productive and energetic behavior (Messersmith, Patel, Lepak, & Gould-Williams, 2011). Thus, the following hypothesis is being suggested:

H₁: Human resources will positively affect strategic performance.

2.2.2 Human resources and productivity

Organizations around the world strategically match their strategies for HRM, best practices, and business plans with their overall corporate strategy to deliver increased organizational efficiency and competitive advantages (Gurbuz & Mert, 2011; Zehir, Gurol, Karaboga, & Kole, 2016; Abdallah &Alkhaldi, 2019). There are many theories in regard to human resources and capital. The most prominent theory emerged from the Becker study (1962), which showed that education is one of the main incentives that allows employees to improve their productivity and gain higher salaries, where the impact of education was recorded by wage discrepancies between individuals who earned different education levels. Becker also argued that ongoing education is an opportunity that must be continued to the point where the marginal productivity gains are balanced with the marginal opportunity costs (Solomon, 2019). The screening theory (Stiglitz (1975), which helps explain how employers notice differences in individual productivity as a way to provide individuals with productivity-based wages, also emerged. Moreover, this theory suggests that at the beginning of work, all employees must be provided with the same remuneration. According to Kang (2015), adjusting performance incentives, large-scale employee recruitment, team-based systems, job restructuring, and employees satisfaction and engagement lead to overall business efficiency improvement. Training and growth will promote employees' future career paths and related skills. As a training climate, the workplace is a catalyst and also produces positive organizational results through strategic implementation (Saks & Burke; Smalley, 2014). The following hypothesis is thus suggested:

H₂: Human resources will positively affect productivity.

2.2.3 Productivity and strategic performance

There is a clear link between productivity and performance improvement. Performance is filtered from the organization's vision, with market measures and financial aspects as the main results, supported by customer satisfaction and flexibility and having productivity as its core business operations (Stabler, 1996). KPIs help measure organizations' progress against their objectives and strategic goals. Moreover, in the last three decades, various models have been developed to measure strategic performance, including a number of performance metrics, such as efficiency, effectiveness, productivity, quality, customer satisfaction, creativity, and employee satisfaction in addition to financial resources to increase institutional performance (Sushil, 2018). Strategic performance management aims to influence organizational performance in such areas as quality, development, competitiveness, efficiency, and outstanding customer service. SPM requires the assessment of individuals and groups to enhance business performance (Gardner, Wright, & Moynihan, 2011; Abdallah et al., 2019).

Understanding the role of systems in determining productivity may be just as critical in recognizing barriers to productivity. Bartelsman et al. (2013) investigated the entry/exit effect of a firm on its country's labor productivity and concluded that the latter can primarily be explained by domestic productivity. Leung et al. (2008) investigated the effect of resource reallocation to large organizations on country labor productivity, providing insights into the process whereby increasing employment in large organizations tends to increase productivity in the country. The following hypothesis is therefore suggested:

H₃: Productivity will positively affect strategic performance.

2.2.4 Human resources, strategic performance, and productivity

Based on knowledge-based theory, which indicates a focus on the knowledge embedded in the individual employee and in the organization in general, Barney (1986) showed that the use of knowledge within an organization creates value for it through what human resources exist within it, which in turn converts the inputs into outputs or what is called productivity (Grant, 1996). Human resources (employees), who have a large human capital, contribute to a high productivity level by reducing the size of the inputs and increasing the use of resources that leads to lower production costs (Youndt & Snell, 2004) accordingly indicated that financial, operational and strategic performance is influenced by productivity (Syverson, 2011). The empirical research of Ciavarella (2003) showed that greater participation contributes to higher rates of engagement and loyalty to an organization, resulting in improved productivity. Patterson et al.'s (2004) study founded that concern for employees' well-being contributes to satisfaction, and higher retention levels result in improved productivity in the analysis of

manufacturing organizations. Wolf and Zwick (2002) argued that there is a good relationship between human resource activities and the success of the productivity level. According to them, HRM activities are related to improvement productivity as well as profits. The following hypothesis is thus suggested:

H₄: Productivity will positively mediate the relationship between human resources and strategic performance.

3. Methodology

3.1 Sample

The population for this study represented the commercial banks in Jordan, the number of which is 26. The authors contacted these banks, and 10 agreed to join the study. The number of employees in these 10 banks is 11,800. The representative sample for the study's population is 375 (Krejcie & Morgan, 1970). To reach the required sample size, 400 questionnaires were distributed. A unit of analysis consisted of employees at different levels. The authors contacted each bank's human resource department to arrange the distribution process. An officer of each bank was assigned to randomly select the participating employees and distribute the questionnaires to them. The number of received questionnaires was 371. However, only 343 were valid. The response rate represents 85.75%, a rate that is higher than many empirical studies conducted in Jordan (e.g., Ayoub et al., 2017; Al-Sa'di et al., 2017; Albuhisi & Abdallah, 2018; Suifan et al., 2018; Nabass & Abdallah, 2019; Ayoub & Abdallah, 2019). A possible explanation for this high rate is that the involved banks assigned one employee to arrange the questionnaire distribution. This was very helpful in acquiring the necessary number of participants from each bank.

3.2 Questionnaire and measures

The authors prepared an English version of the questionnaire and then translated it into Arabic. After, the study questionnaire was tested by eight academics in business schools in three Jordanian universities to assess its suitability in terms of the language, the formulated questions, the scale adopted for the answers, and the frequency of the questions. The questions used in the survey were adopted from Al-Qudah (2014). A total of 20 questions were adopted to measure the three measurement scales. Participants were required to evaluate whether they agreed or disagreed with each question item using a five-point Likert scale, in which 1 designated strongly disapproval, and 5 designated strongly approval.

3.3 Validity and reliability

An intensive literature review was carried out on HRM, productivity, and strategic performance to ensure face validity. The content validity was confirmed by adopting the measurement scales from previous studies that showed a high validity and reliability. The validity of the study's measurement scales was confirmed using exploratory factor analysis (EFA). EFA was carried out using the principal component analysis (PCA) extraction and the varimax rotation methods. The questions for the three scales showed a factor loading greater than 0.40. Further, the eigenvalue for the three scales was greater than 1 (Hair et al., 2010). Table 1 reports the EFA output.

Table 1 EFA of the measurement scales

Item	Human resources	Productivity	Strategic performance
HR 1	0.512		
HR 2	0.468		
HR 3	0.716		
HR 4	0.659		
HR 5	0.729		
HR 6	0.617		
HR 7	0.638		
HR 8	0.723		
PR 1		0.654	
PR 2		0.798	
PR 3		0.874	
PR 4		0.586	
PR 5		0.487	
SP 1			0.894
SP 2			0.752
SP 3			0.642
SP4			0.539
SP 5			0.493
SP 6			0.794
SP7			0.657

The reliability of the measurement scales was tested based on Cronbach's α -coefficient. The three scales demonstrated good reliability values greater than the minimum suggested value of $\alpha \ge 0.70$ (Hair et al., 2010). These values reflect the reliability,

credibility, and internal consistency of the scales (Hair et al., 2010). The Cronbach's α -coefficient, means, and standard deviations are reported in Table 2.

Cronbach's alpha and descriptive statistics of the measurement scales

Measurement scale	Mean	Standard deviation	Cronbach's alpha
Human resources	4.13	0.832	0.863
Productivity	4.08	0.746	0.767
Strategic performance	3.87	0.724	0.806

4. Results

The study hypotheses were tested using the procedure introduced by Baron and Kenny (1986). This procedure has four steps that allow testing all the study hypotheses. The first step includes testing the contribution of the independent variable (IV) on the dependent variable (DV). The results show that human resources have a significant impact on strategic performance (β = 0.536, p < 0.01), thus providing support for hypothesis H_1 . The second step includes testing the contribution of the IV to the mediator. The results show that the impact of human resources on productivity is positive and significant (β = 0.536, p < 0.01). Thus, hypothesis H_2 is accepted. In step three, the contribution of the mediator to the DV should be tested. The effect was also positive and significant (β = 0.536, p < 0.01). Consequently, hypothesis H3 was also accepted. In the last step, both the IV and the mediator were regressed to the DV. Both human resources and productivity showed positive and significant contributions to strategic performance, as reported in Table 3. According to Baron and Kenny (1986), if the direct effect of the IV on the DV (obtained in step 1) becomes insignificant in step 4, then full mediation exists. However, if the direct effect decreased while remaining significant, this implies the existence of partial mediation. The result revealed partial mediation, as the contribution of human resources to strategic performance decreased in step 4 but was still significant. All in all, hypothesis H4 is accepted. Table 3 shows the results of the study's hypotheses.

Table 3

Regression analysis

cogression analysis				
Variables	Step 1	Step 2	Step 3	Step 4
(Constant)	1.510***	1.622***	0.771***	0.453**
Human resources	0.499***	0.598***		0.163***
Productivity			0.659***	0.561***
R	0.499	0.598	0.659	0.672
\mathbb{R}^2	0.249	0.358	0.434	0.451
adjusted R ²	0.247	0.356	0.433	0.448
F-value	119.540***	201.318***	277.104***	148.054***

Note: ***p < 0.01; **p < 0.05.

5. Discussion

The findings have shown that human resources had an impact on strategic performance, with the mediating role of productivity, and adopting HR practices led to increased productivity. Lucier (2009) suggested that HRM requires preparation to attract, grow, and retain employees. The organization's HR plan must be measured, both quantitatively and qualitatively, against its current and future needs (Bhatia 2007). In addition, in terms of commercial banks and their innovative growth, it is important to implement a comprehensive approach to human resources to improve the quality of their performance by focusing on all dimensions of research and development, including operations, methods of organization, financing, and strategy. High performance will be achieved only if comprehensive measures are taken to improve the research and development methods associated with the human component, so that competitiveness is well maintained in accordance with challenging and changing markets (Al-Qudah, 2018). The management of quality and productivity in companies is highly dependent on human resources and HRM. Nonetheless, it varies from organization to organization and from industry to industry. It depends, in particular, on the role of the HRM in a specific organization. In some organizations, the HRM or HR department plays a complex and constructive role in efficiency and quality management. The results are also consistent with those of Fuller (2016), who asserted that employee productivity, often referred to as productivity at work, is in fact an assessment of the efficiency of a worker or group of workers or of the effectiveness of the work performed. The results of the study showed that there is a positive impact of strategic performance in improving productivity, which is reflected at the level of employee satisfaction with the services provided by commercial banks. This confirms the role that human resources and related procedures play in attracting, appointing, and training employees in improving performance. Kim (2014) conducted a research study combining the principles of economics, strategy, and psychology to assess organizations' use of their human resources for organizational performance and employee productivity. The results of the study show that the internal training of selected staff had a direct impact on the workforce's productivity, particularly when the organization was coping with a sluggish economy and had to resist the pressures of recession. Furthermore, organizations applying new approaches in HR and strategic performance would draw many new consumers, who will switch from rivals who do not incorporate new approaches.

6. Conclusion

The study leads to the analysis of the effects of human resources on improving productivity and increases the level of strategic performance management and corporate sustainability concepts, which is increasingly becoming the focus of the banking sector in Jordan. In this study, we concentrate on other specific factors that may also affect performance. The findings indicate that productivity increased the degree of strategic success through human resources. Conversely, success dependency has not been verified in the business sector, regardless of the legal form or size of the company. Based on the findings, the following conclusions are drawn:

First, human resources will positively affect strategic performance. The study found that the significant role played by HR improves strategic performance. Second, human resources will positively affect productivity; the results show that HR has a higher effect on productivity. Third, productivity will positively affect strategic performance. Fourth, productivity will positively mediate the relationship between human resources and strategic performance. The study pointed to the significant role of productivity on the link between human resources and strategic performance.

Based on the discussions and conclusions of this study, it can be concluded that the improvement of HR through the integration of any company's suitable HRM programs, policies, and practices will ensure quality and quantity HR and build a reliable and successful culture within the organization.

7. Research limitations

There are a number of limitations to the study. First, by reviewing the literature, rare studies have been found that develop a validated instrument of human resources on improving productivity. Second, based on the researcher's information, no studies were found that address the measurement of the strategic performance of the banks sector. Future research studies are required to improve the findings of the present study and to increase their generalization. Potential studies in other industries in Jordan, such as service sectors and manufacturing companies, are required to examine the effect of HR on strategic performance. Moreover, future research is needed to investigate the impact of human resources on improving productivity and to increase the level of strategic performance. Additional future studies are required to examine HR and strategic performance in public organizations, as based on the researcher's knowledge, they do not exist in Jordan.

References

- Abdallah, A.B., & Alkhaldi, R. Z. (2019). Lean bundles in health care: a scoping review. *Journal of Health Organization and Management*, 33(4), 488-510.
- Abdallah, A.B., Dahiyat, S.E., & Matsui, Y. (2019). Lean management and innovation performance: Evidence from international manufacturing companies. *Management Research Review*, 42(2), 239-262.
- Abualoush, S. H., Obeidat, A. M., Tarhini, A., Masa'deh, R. E., & Al-Badi, A. (2018). The role of employees' empowerment as an intermediary variable between knowledge management and information systems on employees' performance. *VINE Journal of Information and Knowledge Management Systems*, 48(2), 217-237.
- Albuhisi, A.M., & Abdallah, A.B. (2018). The impact of soft TQM on financial performance: The mediating roles of non-financial balanced scorecard perspectives. *International Journal of Quality & Reliability Management*, 35(7), 1360-1379.
- Al-Ghwayeen, W. S., & Abdallah, A. B. (2018). Green supply chain management and export performance: The mediating role of environmental performance. *Journal of Manufacturing Technology Management*, 29(7), 1233-1252.
- Alkhaldi, R., & Abdallah, A. (2019). Lean management and operational performance in health care: Implications for business performance in private hospitals. *International Journal of Productivity and Performance Management*, 69(1), 1-21.
- Al-ma'ani, B., Al-Qudah, S., & Shrouf, H. (2019). The impact of corporate social responsibility on organizational performance in telecommunication sector in Jordan. Modern Applied Science, Canadian Center of Science and Education, 13(4), 1-11
- Al-Qudah, S., Obeidat, A.M., Shrouf, H., & Abusweilem, M. A. (2020). The impact of strategic human resources planning on the organizational performance of public shareholding companies in Jordan. *Problems and Perspectives in Management*, 18(1), 219-230.
- Al-Qudah, S. (2014). Elements of Strategic Performance to Improve Productivity and achieve Organizational Excellence (An Empirical Study in Jordan Telecom Sector), unpublished Ph. D. Thesis, Al-Jinan University
- Al-Qudah, S. A. (2018). The influence of strategic agility & tackling competitive challenges toward improving performance among Jordanian pharmaceutical companies. *International Journal of Academic Research in Business and Social Sciences*, 8(5), 762–774.
- Al-Sa'di, A.F., Abdallah, A.B., & Dahiyat, S.E. (2017). The mediating role of product and process innovations on the relationship between knowledge management and operational performance in manufacturing companies in Jordan. *Business Process Management Journal*, 23(2), 349-376.
- Andry, J. F., Hartono, H., & Zakir, A. (2020). Assessment IT Governance of Human Resources Information System Using COBIT 5. *International Journal of Open Information Technologies*, 8(4), 59-63.
- Arulrajah, A. A. (2017). Productivity and quality management through human resource management: A systematic review. *International Review of Management and Business Research*, 6(2), 419-437.

- Asongu, S. A. (2017). Knowledge economy gaps, policy syndromes, and catch-up strategies: Fresh South Korean lessons Africa. *Journal of the Knowledge Economy*, 8(1), 211-253.
- Ayoub, H.F., & Abdallah, A.B. (2019). The effect of supply chain agility on export performance: The mediating roles of supply chain responsiveness and innovativeness. *Journal of Manufacturing Technology Management*, 30(5), 821-839.
- Ayoub, H.F., Abdallah, A.B., & Suifan, T.S. (2017). The effect of supply chain integration on technical innovation in Jordan: The mediating role of knowledge management. *Benchmarking: An International Journal*, 24(3), 594-616.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.
- Barney, J.B. (1986). Strategic factor markets: expectations, luck, and business strategy. *Management Science*, 32(10), 1231-1241.
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Bartelsman, E., Haltiwanger, J., & Scarpetta, S. (2013). Cross-country differences in Productivity: The role of allocation and Selection. *American Economic Review*, 103(1), 305-334.
- Bento, A. L., Bento, R., & White, L. F. (2014). Strategic performance management systems: Impact on business results. *Journal of Computer Information Systems*, 54(3), 25-33.
- Bhatia. S.K. (2007). Strategic Human Resource Management: winning through people, Deep & Deep Publications PVT. LTD., New Delhi, India.
- Bratton, J., & Gold, J. (2017). Human resource management: theory and practice. Palgrave.
- Burma, Z. A. (2014). Human resource management and its importance for today's organizations. *International Journal of Education and Social Science*, 1(2), 85-94.
- Ciavarella, M.A. (2003). The adoption of high-involvement practices and processes in emergent and developing firms: a descriptive and prescriptive approach. *Human Resource Management*, 42(4), 337-356.
- De Waal, A. (2013). Strategic Performance Management: A managerial and behavioral approach. Macmillan International Higher Education.
- Gardner, T. M., Wright, P. M., & Moynihan, L. M. (2011). The impact of motivation, empowerment, and skill enhancing practices on aggregate voluntary turnover: *The mediating effect of collective affective commitment. Personnel Psychology*, 64, 315-35
- Grant, R.M. (1996). Toward a knowledge-based theory of the firm. Strategic Management Journal, 17(SI), 109-122
- Grip, A.D., & Sieben, I. (2005). The effects of human resource management on small firms "productivity and employees" wages", Applied Economics, 37(9), 1047-1054.
- Hair, G., Black, B., Babin, B., Anderson, R., & Tatham, R. (2010). *Multivariate Data Analysis*, 7th ed., Pearson, Upper Saddle River, NJ.
- Hayton, J. C. (2003). Strategic human capital management in SMEs: An empirical study of entrepreneurial performance. *Human Resource Management*, 42(4), 375-391.
- Hunger, D. J. (2012). Strategic management and business policy. Pearson Education.
- Kang, S. (2015). *Exploring the link between high performance work systems and innovation*: Rutgers The State University of New Jersey-New Brunswick.
- Kaya, N. (2006). The impact of human resource management practices and corporate entrepreneurship on firm performance: evidence from Turkish firms. *The International Journal of Human Resource Management*, 17(12), 2074-2090.
- Kim, Y., & Ployhart, R. E. (2014). The effects of staffing and training on firm productivity and profit growth before, during, and after the Great Recession. *Journal of Applied Psychology*, 99(3), 361.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and PsychoLogical Measurement, 30(3), 607-610.
- Leung, D., Meh, C., & Terajima, Y. (2008). Firm-size and productivity. Bank of Canada Working paper 2008-45.
- Li, Y., Ashkanasy, N. M., & Ahlstrom, D. (2014). The rationality of emotions: A hybrid process model of decision-making under uncertainty. *Asia Pacific Journal of Management*, 31(1), 293-308.
- Mbugua, G. M., Waiganjo, E. W., & Njeru, A. (2015). The relationship between strategic performance management and employee retention in commercial banks in Kenya. *International Journal of Business Administration*, 6(1), 53-62.
- Messersmith, J. G., Patel, P. C., Lepak, D. P., & Gould-Williams, J. S. (2011). Unlocking the black box: exploring the link between high-performance work systems and performance. *Journal of Applied Psychology*, 96(6), 1105.
- Nabass, E.H., & Abdallah, A.B. (2019). Agile manufacturing and business performance: The indirect effects of operational performance dimensions. *Business Process Management Journal*, 25(4), 647-666.
- Nwachukwu, C., & Chladkova, H. (2019). Firm resources, strategic analysis capability and strategic performance: Organizational strategic as mediator. *International Journal for Quality Research*, 13(1).
- Obeidat, A. M., & Otibi, G. A. (2015). The impact of knowledge sharing tools on levels of organizational learning (Field Study on Jordanian Commercial Banks). *Australian Journal of Basic and Applied Sciences*, 9(5), 253-267.
- Obeidat, A. M., Abualoush, S. H., Irtaimeh, H. J., Khaddam, A. A., & Bataineh, K. A. (2018). The role of organisational culture in enhancing the human capital applied study on the social security corporation. *International Journal of Learning and Intellectual Capital*, 15(3), 258-276.
- Patterson, M., Warr, P., & West, M. (2004). Organisational climate and company productivity: the role of employee affect and employee level. *Journal of Occupational and Organisational Psychology*, 77(2), 193-216.

- Saffar, N., & Obeidat, A. (2020). The effect of total quality management practices on employee performance: The moderating role of knowledge sharing. *Management Science Letters*, 10(1), 77-90.
- Saks, A. M., & Burke-Smalley, L. A. (2014). Is transfer of training related to firm performance? *International Journal of Training and Development*, 18(2), 104-115.
- Solomon, R. T. (2019). Strategies for Human Resources Professionals Using Social Networking Websites for Hiring Decisions.
- Stabler, A. (1996). Productivity, performance measurement and management in logistics. *Asia Pacific Journal of Marketing and Logistics*, 8(2), 46 63
- Stiglitz, J. E. (1975). The theory of 'screening', education, and the distribution of 141 income. *American Economic Review*, 65(3), 283
- Suifan, T.S., Abdallah, A.B., & Al Janini, M. (2018). The impact of transformational leadership on employees' creativity: The mediating role of perceived organizational support. *Management Research Review*, 41(1), 113-132.
- Sushil, M. A. (2018). Strategic performance management system in uncertain business environment: An empirical study of the Indian oil industry. *Business Process Management Journal*, 24(4), 1-21.
- Syverson, C. (2011). What determines productivity? Journal of Economic Literature, 49(2), 326-365.
- Tahmasbi, R. (2012). Design and development of a talent management system in an organization focused on the capital market. PhD thesis, faculty of management, University of Tehran. (In Persian).
- Tërstena, A., Goga, A. J., & Jashari, B. (2020). Improving the efficiency of human resources with the use of new technologies and reorganization process. *International Journal of Research in Business and Social Science* (2147-4478), 9(1), 31-38.
- Wolf, E., and Zwick, T. (2002). Reassessing the impact of high performance workplaces. Discussion Paper No. 02–07, ZEW, Mannheim
- Youndt, M.A., & Snell, S.A. (2004). Human resource configurations, intellectual capital, and organizational performance. *Journal of Managerial Issues*, 16(3), 337-360.
- Zehir, C., Gurol, Y., Karaboga, T., & Kole, M. (2016). Strategic Human Resource Management and Firm Performance: The Mediating Role of Entrepreneurial Orientation. 12th International Strategic Management Conference (pp. 372 381). Antalya: Elsevier Ltd.



© 2020 by the authors; licensee Growing Science, Canada. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (http://creativecommons.org/licenses/by/4.0/).